

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-0116874
Owner:	The Empire District Electric Company
Address:	602 Joplin Street, Joplin, MO 64801
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Empire Energy Center
Facility Address:	2537 Fir Road, Sarcoxie, MO 64862
Legal Description:	NE¼, SW¼, Sec. 16, T28N, R29W, Jasper County
Receiving Stream:	Unnamed Tributary to Cave Spring Branch (U)
First Classified Stream and ID:	Cave Spring Branch (C) (03162)
USGS Basin & Sub-watershed No.:	(11070207-140001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

September 21, 2005

Effective Date

A handwritten signature in black ink, reading "Doyle Childers", is written over a horizontal line.

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

September 20, 2010

Expiration Date

Cynthia S. Davies, Interim Director, Southwest Regional Office

FACILITY DESCRIPTION (continued)

Outfall #001 – Power Plant - SIC #4911

Stormwater from facility.
Flow is dependent upon rainfall.

Outfall #002 – Power Plant – SIC #4911

Non-contact process water from the old reverse osmosis unit.
Design flow is 42,500 gallons per day.

Outfall #003 – Power Plant – SIC #4911

Non-contact process water from the new reverse osmosis unit.
Design flow is 115,700 gallons per day

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 5	
PERMIT NUMBER MO-0116874						
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	twice/year**	24 hr. estimate
Total Suspended Solids	mg/L	*		*	twice/year**	grab
pH – Units	SU	****		****	twice/year**	grab
Oil & Grease	mg/L	15		10	twice/year**	grab
Rainfall*****	inches	*		*	twice/year**	grab
Sulfate	mg/L	*		*	twice/year**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>BI-ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2006</u> .						
<u>Outfall #002 & #003 (Note 1)</u>						
Flow	MGD	*		*	once/quarter***	24 hr. total
Temperature	°F	90		90	once/quarter***	grab
Total Suspended Solids	mg/L	100		30	once/quarter***	grab
pH – Units	SU	****		****	once/quarter***	grab
Fluoride	mg/L	*		*	once/quarter***	grab
Sulfate	mg/L	*		*	once/quarter***	grab
Oil & Grease	mg/L	15		10	once/quarter***	grab
Total Dissolved Solids	mg/L	*		*	once/quarter***	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2006</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** **All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. Sampling shall occur twice a year in the periods of January through June and July through December, please note that monitoring reports shall be submitted no later than the 28th day of the month following the monitoring period (July 28th and January 28th, respectively). If a precipitation event does not occur within the reporting period, report as no discharge.** For tracking purposes samples taken anytime in the first part of the year (January through June) will be recorded by the department as though they were taken in June, samples taken anytime in the second part of the year (July through December) will be recorded by the department as though they were taken in December.
- *** Sample once per quarter in the months of **March, June, September, and December**. Reports shall be submitted by the 28th day of the month following the reporting period, e.g. Reporting period is the 1st quarter (sample collected in March), report due by April 28th.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- ***** The total precipitation for the event sampled shall be reported.

Note 1 - Please note that sampling shall occur before the discharge enters the stormwater system.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;

C. SPECIAL CONDITIONS (continued)

- (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.
6. Water Quality Standards
- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.